Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

	)	GEN Docket No. 90-314
	)	ET Docket No. 92-100
In the Matter of	)	
	)	RM-7140, RM-7175, RM-7617,
Amendment of the Commission's	)	RM-7618, RM-7760, RM-7782,
Rules to Establish New Personal	)	RM-7860, RM-7977, RM-7978,
Communications Services	)	RM-7979, RM-7980

REPLY COMMENTS OF COMCAST PCS COMMUNICATIONS, INC.

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SUMMARY

The allocation and licensing of 2 GHz spectrum present the Federal Communications Commission (the "Commission") with an unprecedented opportunity to introduce competition into the local exchange monopoly. Personal Communications Services ("PCS") will offer consumers a wide array of untethered mobile communications capabilities and services. Once PCS is interconnected with existing and emerging networks, it will provide residential and business consumers with the ability to choose among various providers of local and long-distance communications services -- a choice that is not available today. The Commission must ensure that its policies further, rather than foreclose, this vision.

An initial period of ineligibility for in-market local exchange carriers ("LECs") and LEC-affiliated cellular operators is essential to this vision. LECs and their affiliates do not share the goal of creating a competitive market for local communications, a goal that unites numerous commenters in this proceeding. Because LECs' and LEC affiliates' in-market participation as PCS licensees during the deployment stage would hinder the development of these services, their eligibility should be subject to this narrowly tailored restraint. The Commission should reject the unfounded assumption that, without the participation of LECs and their affiliates as PCS licensees, PCS will not be efficiently and rapidly deployed. To the contrary, the

ground-breaking PCS experimentation of many non-LECs demonstrates that the development of PCS will be in competent, committed hands.

Furthermore, the Commission should contrast the problematic aspects of LEC participation in PCS with the benefits that non-wireline cellular operators and cable operators bring to the implementation of PCS. As the Commission's Office of Plans and Policy recently noted in its working paper on PCS, the joint operation of cellular and/or cable with PCS systems offers particularly attractive arrangements in terms of costs and efficiencies.[1/]

To further facilitate the vision and possibilities of PCS, the Commission should authorize four providers per LATA-sized market, assign each provider 20 MHz of PCS spectrum and create a spectrum reserve with additional PCS spectrum.[2/] Proposals for licensing four or more providers per service area and assigning 20 MHz blocks are widely espoused by commenters in this proceeding. Comcast PCS Communications Inc.'s proposal will provide licensees with

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1/ See generally "Putting It All Together: The Cost Structure of Personal Communications Services" by David P. Reed, Office of Plans and Policy of the Federal Communications Commission, dated November 1992 ("OPP Paper") at 32-43 and 57-58.

2/ See generally Comments of US West, Inc., AT&T, Bell Atlantic Personal Communications, Inc., Telmarc Telecommunications, Inc., Vanguard Cellular Systems, Inc., BellSouth, Southwestern Bell Corporation, McCaw Cellular Communications, Inc., Alltel Corporation, Cox Enterprises, Inc., Viacom International, Inc. and Cablevision Systems Corporation.

sufficient spectrum to deploy services and create a reserve to allow licensees to expand their systems over time. LATA-sized PCS service areas strike the appropriate balance between undue fragmentation and consolidation of PCS markets and will advance the ultimate goal of providing competition to local communications. Finally, the Commission should permit intersystem operability and licensee selection of regulatory status. These policies will promote maximum development of PCS.

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REPLY COMMENTS OF COMCAST PCS COMMUNICATIONS, INC.

Comcast PCS Communications, Inc. ("Comcast"),[3/] by its attorneys, hereby submits its reply to comments filed in response to the Federal Communications Commission's (the "Commission") Notice of Proposed Rulemaking and Tentative Decision to Establish New Personal Communications Services, 7 FCC Rcd 5676 (1992) (the "Notice").[4/]

I. INTRODUCTION

Comcast encourages the Commission to adopt a broad vision of personal communications services ("PCS") in this proceeding. The Commission will be best able to promote the development of PCS by authorizing four licensees in LATA-

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3/ Comcast is a wholly-owned subsidiary of Comcast Corporation.

4/ On November 9, 1992, Comcast filed its comments on the Notice.

sized PCS service areas and by imposing limited eligibility restrictions upon local exchange carriers ("LECs") which: 1) restrain their incentive and ability to undermine competition; and 2) encourage them to focus upon providing essential services and facilities to competitive providers of PCS.

Comcast also urges the Commission to adopt flexible policies, including the authorization of intersystem operability and licensee selection of regulatory status. These policies will foster the development of a family of services capable of offering competition to existing wired and wireless services. Moreover, these policies will promote the development of an array of emerging wireless voice, data and other communications services.

Comcast is committed to the integration of new communications technologies and the provision of viable, low-cost competition to existing networks to provide choice to the American consumer.[5/] As a diversified, non-LEC controlled cellular, cable and alternative access operator, Comcast is uniquely suited to combine diverse technologies to provide PCS. Consistent with the Commission's recently released Office of Plans and Policy working paper on PCS,

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5/ See Comments of Comcast at 1-5 (discussing Comcast's development of cable television, cellular radio and alternative access services as well as Comcast's PCS experimentation).

Comcast views the joint operation of cellular and/or cable with PCS systems as a particularly attractive and efficient PCS partnership.[6/] Comcast believes that the effective utilization of existing broadband cable and non-wireline cellular networks is essential to providing untethered, moderately priced voice and data PCS services on a mass scale.[7/]

In response to the Notice, Comcast offered the following recommendations for regulation of PCS in its comments:

* Non-wireline affiliated cellular providers should be eligible to hold PCS licenses within their cellular service markets and any other market;

* LECs and their affiliated cellular radio service providers should not be eligible to hold PCS licenses within their landline franchise areas until effective competition develops or an initial period of time expires;

* Authorization of four PCS providers per LATA, assignment of 20 MHz of spectrum to each provider, and the creation of a spectrum reserve will foster competition, innovation and spectrum efficiency;

6/ See "Putting It All Together: The Cost Structure of Personal Communications Services" by David P. Reed, Office of Plans and Policy of the Federal Communications Commission, dated November 1992 ("OPP Paper") at 57-58.

7/ See OPP Paper at viii, Matrix entitled "Subjective Assessment of Sources of PCS Functional Components Across Infrastructure Alternatives" (noting the economies of scope existing between PCS functional components and cable television, PCS functional components and cellular networks and PCS functional components and cable/cellular joint ventures); See also OPP Paper at 34, 37 and 45.

* PCS licensees should be permitted to interoperate with up to 40 MHz of spectrum[8/] as well as to coordinate their systems in other ways and engage in spectrum swaps;

* LATA-sized service areas will advance the public interest by striking the appropriate balance between fragmentation and consolidation of PCS markets and promoting competition within the local loop;

* The Commission should reject the option of nationwide PCS licensing;

* Modified lotteries are the best available mechanism for award of PCS licenses;

* The Commission should adopt strict construction timetables and impose stringent conditions on transfers of PCS licenses;

* A fifteen year license term with a significant renewal expectancy would promote the public interest;

* PCS licensees should be permitted to select private or common carriage based on the nature of the particular PCS service; and

* Cost-based and unbundled interconnection with the public switched network is essential for PCS.

Comcast reaffirms these positions and confines its reply comments to a limited number of issues of critical importance to the emergence of PCS. These issues are: licensee eligibility, spectrum assignment, intersystem operability, service areas and regulatory status.

8/ See Comments of Comcast at 21 n.29; OPP Paper at 55.

II. LICENSEE ELIGIBILITY

A. Any qualified applicant should be eligible to hold a PCS license except that LECs and their cellular radio affiliates should not be eligible to hold PCS licenses within their landline franchise areas until effective competition develops or an initial period of time expires.

Comcast supports a policy of open eligibility for participation in PCS, subject only to the initial restraint upon in-market LEC and LEC-affiliated cellular eligibility that is necessary to foster a competitive market for PCS services. Specifically, Comcast proposes that LECs and their affiliated cellular radio service providers should not be eligible to hold PCS licenses within their landline franchise areas until either effective competition has developed or an initial period of time has expired.[9/]

Comcast proposes no restriction outside the landline franchise area on LEC or LEC-affiliated cellular eligibility for PCS licenses.[10/] An initial period of ineligibility for

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9/ The ban on in-market LEC participation should continue until local loop competition develops. Once competitive PCS local loop services are available to 50 percent of the residences in the relevant licensing area and at least 15 percent of households subscribe, the LEC could apply to provide PCS via available PCS spectrum. Alternatively, the Commission could permit LECs to obtain PCS authorizations within their local loop markets after an initial period of time, assuming the presence of competitive alternatives. See, e.g., Cable Television Consumer Protection and Competition Act of 1992, 47 U.S.C. § 543.

10/ For example, if Pacific Telesis completes its recently announced wireless spin off in the manner described, no restrictions would be placed upon the ability of the new cellular operator to apply for PCS licenses.

in-market LEC and LEC-affiliated cellular is imperative, however, if the Commission is to promote the development of service provider alternatives to the LECs and their cellular affiliates.[11/]

As stated in its comments, Comcast urges the Commission to reject the Notice's tentative assertion that "there is a strong case for allowing LECs to provide PCS within their respective service areas."[12/] There is no evidence to support this position. Significantly, the Commission states

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11/ As Comcast notes in its comments, a policy of foreclosing an incumbent from acquiring communications facilities or spectrum to promote competition is not new. See Telephone Company - Cable Television Cross - Ownership Rules, 71 RR 2d 70 (1992); See also Telephone Company - Cable Television Cross - Ownership Rules, Memorandum Opinion and Order on Reconsideration, 7 FCC Rcd 5069 (released August 14, 1992) (Commission prohibits LECs from acquiring cable systems; while permitting the LEC to provide "video dial tone services" competition with the existing cable operator would enhance competition, LEC acquisition of existing in-market cable operators would not enhance competition.) See also Amendment of Parts 21, 43, 74, 78 and 94 of the Commission's Rules Governing Use of the Frequencies in the 2.1 and 2.5 GHz Bands Affecting: Private Operational - Fixed Microwave Service, Multipoint Distribution Service, Multichannel Multipoint Distribution Service, Instructional Television Fixed Service, and Cable Television Relay Service, Report and Order, 5 FCC Rcd 6410 (October 1990); Second Report and Order, 6 FCC Rcd 6792 (October 1991) (Commission prohibits cable operators from applying for "wireless cable" licenses within their cable markets because competition would be diminished without such a prohibition.); Cable Act of 1992, § 11(a); 47 U.S.C. § 613 (as amended) (Section 11(a) of the Cable Television Consumer Protection and Competition Act of 1992 prohibits cable operators from offering SMATV service in any portion of the area served by the cable operator's system).

12/ Notice, 7 FCC Rcd at 5705.

that "[i]nitially, [the Commission] expect[s] that PCS primarily will complement LEC-provided wire loops, while over time PCS may become a full fledged competitor to wireline services."[13/] Comcast submits that, if LECs are permitted to participate in their landline markets, PCS may never develop beyond a complement to the LEC local loop.

The Commission also should recall that, during the cellular rulemaking process, it was widely and erroneously believed that only the former Bell System could provide cellular services. This assumption proved to be wildly inaccurate. In this rulemaking, the Commission should not assume that only the LECs are capable of rapidly deploying PCS. In fact, the majority of firms holding PCS experimental licenses are non-LEC-affiliated licensees.[14/]

The evolution of the cellular radio industry shows the effects of open-ended Bell Operating Company ("BOC") participation over geographically extensive market areas.

13/ See Notice, 7 FCC Rcd at 5705.

14/ Contrary to the claims of NYNEX, Pacific Telesis, US West, Inc., Southwestern Bell Corporation, BellSouth and others, the development of PCS as an accessible, reliable service for all users is not dependent on LEC participation as licensees in PCS. The achievement of these goals is dependent upon the elimination of LEC domination of telecommunications services. See Report and Order and Notice of Proposed Rulemaking, 7 FCC Rcd 7369 (released October 19, 1992) (the "Expanded Interconnection proceeding"). Moreover, the LECs' expertise in the field of telecommunications is equalled by Comcast and others who have successfully provided cellular and other services for years.

First, the size and contiguity of cellular markets awarded to the BOCs caused virtually all other cellular providers to consolidate markets. Often, these consolidations resulted in the acquisition of non-wireline operations by the BOCs. Second, by stubbornly refusing to provide cost-based interconnection, prompt numbering and other essential services, the LECs have favored their cellular affiliates, as have their BOC counterparts, thereby hindering competition and the development of a competitive alternative to the monopoly local exchange.

The blatantly anti-competitive intentions of the LECs are demonstrated by NYNEX's argument that LECs should be fully eligible for PCS licenses, even in markets where the LEC has an affiliated cellular carrier, but that non-LEC-affiliated cellular carriers should be eligible for PCS licenses only outside their current cellular service areas.[15/] If adopted, this proposal would give LECs and their affiliates a grossly unfair advantage over all other PCS licensees. NYNEX's proposal singles out and rewards monopolists and denies spectrum to new entrants. The Commission must reject such self-serving proposals that would perpetuate and exacerbate anti-competitive concerns associated with the LECs.

15/ See Comments of NYNEX at 8-21.

Comcast submits that LECs and LEC affiliates, for understandable reasons, do not share the vision of creating a competitive alternative to the local exchange. If allowed to become PCS licensees during the developmental stages of PCS, and particularly if the Commission adopts a PCS set aside, LECs and LEC-affiliated cellular carriers will be positioned to undermine new competitors that seek to compete with the LECs' local exchange offerings. Initial eligibility would allow these carriers to develop PCS services as non-competitive complements to landline telephone service.

Such initial eligibility also would encourage LECs to engage in abusive practices in the provision of essential facilities upon which PCS providers will be heavily dependent. For example, LEC provision of useful interconnection will be undermined if these carriers also have a stake in furthering the profitability of their PCS affiliate. As Commission staff recognize: "[i]nterconnection issues, in particular, raise a number of serious policy concerns since many PCS [providers] are not likely to succeed without interconnection to [the] public telephone network at reasonable rates. Because telephone companies could view PCS as a competitive threat to their own wireline cellular subsidiary, or even to basic telephone service, they may try to disadvantage competitors with

inferior interconnection."[16/] If LECs are permitted to become PCS licensees, interconnection services could be fashioned to give preference to their affiliated service provider, or alternatively, to use that relationship to stifle the development of new services. These anti-competitive practices will quash efforts to develop PCS services as an alternative to the local loop.[17/]

Conversely, if LEC and LEC cellular affiliates are ineligible for an initial period, PCS providers will have the opportunity to create and integrate diverse communications networks comparatively free from the enervating disputes over interconnection and pricing of LEC services.[18/] This eligibility policy also will have the

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16/ See OPP Paper at 59. Similarly, the Department of Justice ("DoJ") notes in its comments that "[a]ppropriate interconnection requirements are crucial if PCS is to evolve efficiently." Comments of the DoJ at 31.

17/ Vanguard Cellular Systems, Inc., Viacom International, Inc. and Cox Enterprises, Inc. are some of the other commenters that oppose LEC in-market eligibility. See Comments of Vanguard Cellular Systems, Inc. at 13-15, Viacom International, Inc. at 18-19 and Cox Enterprises, Inc. at 16-22. Vanguard Cellular Systems, Inc. describes a case in the cellular industry involving exorbitant interconnection charges demanded by New England Telephone and states that "the record on cellular interconnection demonstrates a substantial probability that a LEC authorized to provide PCS in its local wireline exchange area would seek to discriminate against a PCS competitor seeking interconnection." Comments of Vanguard Cellular Systems, Inc. at 14.

18/ However, even if LECs and LEC-affiliated cellular operators are ineligible in-market, the Commission must

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salubrious effect of encouraging the LECs to focus on providing essential services and facilities to PCS providers. As the Department of Justice correctly concludes in its comments, "wireless communications services offer the possibility of competition in markets that have heretofore been served by monopoly local exchange carriers."[19/]

Comcast has demonstrated the possibilities of PCS spectrum, when used in conjunction with existing non-LEC communications plant, to offer consumers an alternative to the local loop monopoly. On September 10, 1992 Comcast connected a five-way trans-Atlantic conference call linking three cities using wired and wireless technologies operated by Comcast Corporation's cellular and personal communications systems, fiber optics operated by Eastern TeleLogic Corporation and the fiber optic/coaxial cable plant and fiber optic twisted pair plant both operated by Comcast's affiliate, Cable London. No LEC facilities were

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18/ (...continued)
ensure that a PCS operator may obtain the type of interconnection that is appropriate for a particular PCS system at reasonable rates and on terms and conditions no less favorable than those offered to any other carrier, customer or the LEC itself. See Comments of Comcast at 36.

19/ Comments of DoJ at 31. See also OPP Paper at 59-60. ("[V]iable alternatives to the telephone network could exist for PCS switching and transport. The presence of economies of scope between PCS and telephone, cable television, and cellular services indicates that multiple networks could develop in the subscriber loop if interconnection rules are adopted.")

employed in this call. Comcast has demonstrated the potential of introducing competition into the local exchange via new technologies. Comcast urges the Commission to take the necessary steps to begin this process.

If the Commission declines to foreclose in-market LECs and LEC-affiliated cellular operators from initial eligibility as PCS licensees, then equal treatment of non-wireline cellular and LEC and LEC-affiliated cellular is imperative. Specifically, if LECs are eligible for 10 MHz licenses with the ability to apply for additional spectrum subsequently, non-wireline cellular should have the same opportunity. If LECs or LEC-affiliated cellular operators are granted a PCS license in-market set aside, then the Commission also must grant the non-wireline cellular provider a set aside. Moreover, if LECs or LEC cellular affiliates are granted a license in any particular market, the Commission must also grant the non-wireline cellular provider a license in that market. Otherwise, PCS may never develop beyond a complement to the LEC local loop.

B. Non-wireline cellular radio service providers and out of market LEC cellular affiliates should be permitted to hold PCS licenses.

Comcast urges the Commission to permit non-wireline cellular operators[20/] to hold PCS licenses in markets that

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20/ The term "non-wireline cellular" refers to a cellular service provider offering service in a market in which it does not have a LEC affiliate.

overlap or encompass their own or any other cellular service market. Unlike wireline operators, the non-wireline cellular operator and its PCS affiliate have no corresponding monopoly affiliate to protect, or essential services such as interconnection to withhold from competing PCS providers. Indeed, competition will be advanced by overlapping, non-wireline cellular participation in PCS. To the extent, however, that the wireline operator's market is co-extensive with the LEC's and the wireline cellular entity is licensed to provide PCS, the prospects for vigorous competition will diminish.[21/]

In addition to offering a pro-competitive presence, non-wireline cellular operators bring expertise in mobile communications. Years spent building and improving wireless communications infrastructure have provided cellular carriers such as Comcast the skill needed for the rapid and efficient deployment of PCS. Comcast shares McCaw Cellular Communications' judgment that non-wireline operators "understand the complexities of raising capital, negotiating

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21/ Comcast noted in its comments that "[n]on-wireline cellular operators might have posed a potent competitive threat to the local exchange except for their total dependence upon the LEC for local interconnection services at rates that have not been cost-based and the Commission's wireline set-aside which insulated LECs from costly hearings, lotteries and acquisitions." Comments of Comcast at 11 n.13. Therefore, although cellular and other mobile providers compete intensely within a market, the potential to compete with wired services was foreclosed by the wireline set aside and other regressive regulatory policies.

for cell sites, constructing facilities, choosing and developing new technologies, refining pricing and marketing strategies, and effectively meeting customer needs so as to build and maintain a loyal customer base."[22/]

Moreover, the entry of non-wireline cellular operators should benefit consumers through the exploitation of economies of scope that exist between PCS and cellular. For example, the OPP Paper suggests, "cellular operators could take advantage of natural propagation characteristics by using 2 GHz spectrum to deliver PCS using microcells, while continuing to use their 800 MHz frequencies for mobile services."[23/] The OPP Paper further states that "[t]his arrangement might be particularly attractive for a joint merger between cellular and cable television companies where the cable television network provides backhaul for a microcell PCS network at 2 GHz."[24/] Comcast is in an ideal position to realize such scope economies and to pass on the resulting benefits to the consumer.[25/] Because these economies may be significant, Comcast agrees with Vanguard

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22/ Comments of McCaw Cellular Communications, Inc. at 31.

23/ See OPP Paper at 58.

24/ Id.

25/ See Request for Award of Pioneer Preference filed by Comcast on May 4, 1992, and Supplement to Application for Pioneer Preference for Personal Communications Services of Comcast PCS Communications, Inc., filed on June 25, 1992.

Cellular Systems, Inc. that, if the Commission prohibits cellular licensees from using their existing wireless networks in conjunction with PCS spectrum, the Commission will jeopardize the prompt delivery of affordable, diverse and universal PCS services.[26/]

The Notice's recommendation that all cellular operators be excluded from PCS eligibility within their cellular service areas is fundamentally flawed. It is apparently premised on the belief that PCS will be a competitive alternative to cellular radio. PCS will, however, differ from cellular in significant ways. It will be a more portable mobile service that features low-power, light-weight handsets, operating in very small microcells. PCS may compete with cellular at the margins, but it will have capabilities that will far surpass those of cellular and will be likely to attract a new group of users.[27/]

More importantly, PCS spectrum is an essential element of the communications infrastructure necessary to create an alternative local exchange service. PCS spectrum and base stations will facilitate the integration of local networks and, thus, have the potential to introduce meaningful

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26/ See Comments of Vanguard Cellular Systems, Inc. at 17-18.

27/ In addition, whereas cellular radio is primarily a mobile service for business users, PCS will likely serve residential users.

competition to the local exchange monopoly. The joint operation of non-wireline affiliated cellular, PCS and broadband transport networks within the relevant service markets is essential to the near-term development of vigorous local exchange competition. Thus, the Commission should not limit the potential of PCS by envisioning it as "advanced cellular." As BellSouth states in its comments, the Commission should strive to create a new service rather than simply "a new player in an existing service [cellular]."[28/]

Perhaps because the Notice treats PCS as essentially "advanced cellular," many of the comments are devoted to whether the cellular market is competitive. Certainly, the introduction of PCS affords the Commission an opportunity to increase the number of mobile service providers. Throughout the United States today, the mobile telephone service market encompasses more than the two cellular providers. In addition to numerous resellers in many markets, specialized mobile radio ("SMR") providers and radio common carriers provide services that are substantially similar to cellular services, even though they are not perfect cellular substitutes. Within the next several years, enhanced specialized mobile radio ("ESMR") -- a digital SMR -- will

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28/ Comments of BellSouth, Corporation, BellSouth Telecommunications, Inc. and BellSouth Enterprises, Inc. at 68-69.

be deployed in many markets and will increase further the competitive nature of the mobile radio services market.

A recent study produced by the National Economic Research Associates, Inc. ("NERA") concludes that there is sufficient competition in cellular today.[29/] The NERA study finds that: there is significant price competition among cellular providers; consumer prices appear to be falling in the cellular markets; and cellular competition is adequate currently to prevent the creation of market power by any cellular carrier.[30/]

A major misconception in the Notice is that cellular operators will be able to provide PCS within their existing

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29/ See "Assigning PCS Spectrum: An Economic Analysis of Eligibility Requirements and Licensing Mechanisms" prepared for BellSouth Corporation, BellSouth Telecommunications, Inc., BellSouth Enterprises, Inc. by National Economic Research Associates, Inc. dated November 9, 1992 ("NERA Study") at 10-14.

Comcast also notes that the GAO Report on the cellular market states that there has been no increase in cellular prices in recent years and that cellular rates have decreased in real dollars. See "Concerns About Competition in the Cellular Telephone Service Industry" dated July 1992, Report to the Honorable Harry Reid of the United States Senate at 22-26 (stating that, during the period of 1985 to 1991, the real, or inflation-adjusted, average price for cellular service fell by approximately 27 percent). In its Report, the GAO also identified the competitive influence that SMR systems and ESMR systems will exert on the mobile services market. Id at 37-39.

30/ The NERA study also finds that the annual growth rates for subscribership for cellular services have averaged between 30 and 50 percent in recent years. See NERA Study at 10.

cellular spectrum. Although cellular operators have the expertise to provide PCS, cellular services offered in the 800 MHz band are subject to severe spectrum capacity constraints, particularly in urban markets, primarily due to the continuing need to provide analog capacity.

For the near-term, analog will continue to dominate cellular subscribership due to pricing and prior subscription arrangements, despite the availability of dual-mode phones. By the time that PCS is deployed, there may well be 12 to 15 million analog cellular subscribers. Because the majority of these subscribers will not replace their existing handsets for years, a significant period of time will be required to phase out analog cellular service. Moreover, even after the full deployment of digital cellular, some spectrum must be reserved for analog customers who do not convert, particularly for roamers.[31/] Even if the Commission eliminates the requirement that cellular operators provide some analog capacity, business considerations will continue to make these demands on available cellular spectrum. It is not feasible for a cellular operator to provide full-featured PCS with its current allocation of cellular spectrum.

31/ In many parts of the country, especially in rural areas, cellular systems may not convert to digital for many years.

There also are significant cost and technical issues to overcome before cellular operators may participate in providing PCS services within their existing spectrum allocations. There is little doubt that cellular operators will continue to develop and deploy more portable customer premises equipment ("CPE") and microcells to better serve customers. These advances, much like the conversion to digital, will enhance the quality of cellular service. However, no one advance, nor all of them together will be adequate to offer PCS services on a broad scale. For all of these reasons, the Commission should allow non-wireline cellular operators to become PCS licensees both within and beyond their current cellular service areas.

American Personal Communications ("APC") invokes many of the foregoing misconceptions regarding cellular to support its proposed ban on cellular participation in PCS.[32/] PerTel, Inc., supports APC's ban and suggests that entities with interests in SMR licenses that cover the proposed PCS service area should not be eligible for a PCS license in

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32/ APC proposes that, if a cellular licensee currently provides service to more than twenty percent of the population of a PCS service area, it should not be permitted to hold a PCS license in the same PCS service area. See Wayne N. Schelle's letter to Chairman Alfred C. Sikes dated November 9, 1992.

that area.[33/] These proposals do not address the limitations of cellular and SMR to provide existing services as well as new services within their current spectrum allocation. Good public policy requires the Commission to authorize the largest number of entities in the available spectrum.

C. Cable infrastructure offers "a competitive PCS transport alternative to the telephone network."[34/]

Similar to the benefits that non-wireline cellular participation can bring to the implementation of PCS, existing cable television infrastructure offers an important, efficient method for PCS transport. In its May 1992 PCS pioneer preference application, Comcast demonstrated that cable could provide the backbone network function essential to the cost-effective introduction of PCS.[35/] The OPP Paper, nearly six months later, endorses this conclusion, finding that:

> [C]able companies that have upgraded their systems with fiber backbones present a competitive PCS transport alternative to the telephone network. Because cable companies generally have experience in transport services, plus shared network maintenance, administrative, and billing functions, they are logical candidates for

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33/ PerTel proposes that entities having interests in SMR licenses that cover more than twenty percent of the population of the proposed PCS service area should not be eligible for a PCS license in that area. See Comments of Pertel, Inc. at 9.

34/ OPP Paper at 36.

35/ See Request for Award of Pioneer Preference filed by Comcast on May 4, 1992 at 8.